UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,721	07/25/2003	Hiroyuki Tsuji	11-173	9683

23400 7590 10/19/2004	EXAMINER
POSZ & BETHARDS, PLC	NGUYEN, HUNG T

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ART UNIT	PAPER NUMBER
2636	

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/626,721	TSUJI ET AL.
	Examiner	Art Unit	
	Hung T. Nguyen	2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 July 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-45</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-45</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>25 July 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some *   c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/25/03 & 9/21/04</u>.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Specification

1.   The specification & abstract in the invention are objected to because the term "ID" which

is not clear. Therefore, the term "ID" must be spelled out. Appropriate correction is required.

Claim Objections

2.   Claims 1-45 are objected to because the term "ID" are used in the claims which is not

clear. Therefore, the term "ID" must be spelled out. Appropriate correction is required.

In claim 1, line 3, delete "with" before "said air pressure";

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claim 44 is rejected under 35 U.S.C. 102(b) as being anticipated by Mendez et al. (U.S.

5,463,374).

Regarding claim 44, Mendez discloses a tire air pressure sensor (14) in a vehicle [figs.1-3, col.1,

line 67 to col.2, line 45 and col.3, lines 27-66] comprising:

- a transmission step as a plurality of tire pressure sensors (14) which may transmit (42)

identification code signal as command by a processor (24) [figs.1-3, col.1, line 67 to col.2, line

45 and col.3, lines 27-66];

- a reception step as a receiver to receive identification code signal from the transmitter (42) [

figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66];

- a plurality of tire pressure sensors (14) which may transmit (42) identification code signal to a

receiver (22) when the air pressure of the tire is below or higher than predetermined setting /

threshold value in a memory device / EEPROM (25) as command by a microprocessor (24) [

figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   Claims 1-8, 11-22, 25-37, 40-43 & 45 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Mendez et al. (U.S. 5,463,374).

Regarding claims 1-2, Mendez discloses a method storing / programming air pressure in a

vehicle [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66] comprising:

- a transmission step as a plurality of tire pressure sensors (14) which may transmit (42) identification code signal as command by a processor (24) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66];

- a reception step as a receiver to receive identification code signal from the transmitter (42) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66];

- a plurality of tire pressure sensors (14) which may transmit (42) identification code signal to a receiver (22) when the air pressure of the tire is below or higher than predetermined setting / threshold value in a memory device / EEPROM (25) as command by a microprocessor (24) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

Mendez does not specifically mention a term as registration of an identification code of the tire air pressure as claimed by the applicant.

However, Mendez does teach that every tire in the vehicle can be programmed their air pressure threshold value in the memory device in a form of EEPROM (25) from the processor (24) which for detecting the air pressure of the tire is below or higher than predetermined setting / threshold value in a memory device / EEPROM (25) as command by a microprocessor (24) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the system of Mendez for storing / programming / registering the air pressure threshold value in the memory as a tire pressure monitoring system.

Regarding claims 3-4, Mendez teaches that every tire in the vehicle can be programmed their air pressure threshold value in the memory device in a form of EEPROM (25) from the processor

(24) which for detecting the air pressure of the tire is below or higher than predetermined setting / threshold value in a memory device / EEPROM (25) as command by a microprocessor (24) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

Regarding claims 5-6 & 7-8, Mendez teaches that every tire in the vehicle can be programmed their air pressure threshold value in the memory device in a form of EEPROM (25) from the processor (24) which for detecting the air pressure of the tire is below or higher than predetermined setting / threshold value in a memory device / EEPROM (25) as command by a microprocessor (24) includes warning message (64) [figs.1-3, 5, col.3, lines 27-54, col.4, lines 33-41 and col.5, lines 1-16].

Regarding claims 11-12, Mendez discloses the plurality of tire pressure sensors (14) which may transmit (42) identification code signal as command by a processor (24) / portable keyless entry remote control (16) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66].

Regarding claims 13-14, Mendez discloses the plurality of tire pressure sensors (14) which may transmit (42) identification code signal as command by a processor (24) as the ignition switch is turn on [figs.7-8, col.3, lines 27-66 and col.5, lines 32-56].

Regarding claims 15-16, Mendez discloses a system for storing / programming air pressure in a vehicle [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66] comprising:

- a transmission step as a plurality of tire pressure sensors (14) which may transmit (42) identification code signal as command by a processor (24) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66];

- a reception step as a receiver to receive identification code signal from the transmitter (42) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66];

- a plurality of tire pressure sensors (14) which may transmit (42) identification code signal to a receiver (22) when the air pressure of the tire is below or higher than predetermined setting / threshold value in a memory device / EEPROM (25) as command by a microprocessor (24) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

Mendez does not specifically mention a term as registration of an identification code of the tire air pressure as claimed by the applicant.

However, Mendez does teach that every tire in the vehicle can be programmed their air pressure threshold value in the memory device in a form of EEPROM (25) from the processor (24) which for detecting the air pressure of the tire is below or higher than predetermined setting / threshold value in a memory device / EEPROM (25) as command by a microprocessor (24) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the system of Mendez for storing / programming / registering the air pressure threshold value in the memory as a tire pressure monitoring system.

Regarding claims 17-20, Mendez discloses the plurality of tire pressure sensors (14) which may

transmit (42) identification code signal as command by a processor (24) [figs.1-3, col.1, line 67

to col.2, line 45 and col.3, lines 27-66];

- every tire in the vehicle can be programmed their air pressure threshold value in the memory

device in a form of EEPROM (25) from the processor (24) which for detecting the air pressure of

the tire is below or higher than predetermined setting / threshold value in a memory device /

EEPROM (25) as command by a microprocessor (24) / portable keyless entry remote control

(16) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

Regarding claims 21-22, Mendez discloses the plurality of tire pressure sensors (14) which may

transmit (42) identification code signal as command by a processor (24) [figs.1-3, col.1, line 67

to col.2, line 45 and col.3, lines 27-66];

- every tire in the vehicle can be programmed their air pressure threshold value in the memory

device in a form of EEPROM (25) from the processor (24) which for detecting the air pressure of

the tire is below or higher than predetermined setting / threshold value in a memory device /

EEPROM (25) as command by a microprocessor (24) / portable keyless entry remote control

(16) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

Regarding claims 25-26, Mendez discloses the plurality of tire pressure sensors (14) which may

transmit (42) identification code signal as command by a processor (24) / portable keyless entry

remote control (16) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66].

Regarding claims 27-28, Mendez discloses the plurality of tire pressure sensors (14) which may

transmit (42) identification code signal as command by a processor (24) as the ignition switch is

turn on [figs.7-8, col.3, lines 27-66 and col.5, lines 32-56].

Regarding claim 29, Mendez discloses a tire air pressure monitoring system [figs.1-3, col.1, line

67 to col.2, line 45 and col.3, lines 27-66] comprising:

- a plurality of tire pressure sensors (14) which may transmit (42) identification code signal [

figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66];

a memory device / EEPROM (25) for storing threshold value as identification code [figs.1-3,

col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

- a reception step as a receiver to receive identification code signal from the transmitter (42) [

figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66];

- a microprocessor (24) / controller for detecting an air pressure of the tire is below or higher

than predetermined setting / threshold value in a memory device / EEPROM (25) includes

warning message (64) [figs.1-3, 5, col.3, lines 27-54, col.4, lines 33-41 and col.5, lines 1-16];

- the plurality of tire pressure sensors (14) provided in the vehicle body which may transmit (42)

identification code signal as command by a processor (24) [figs.1-3, col.1, line 67 to col.2, line

45 and col.3, lines 27-66];

- the plurality of tire pressure sensors (14) which may transmit (42) identification code signal to

a receiver (22) when the air pressure of the tire is below or higher than predetermined setting /

threshold value in a memory device / EEPROM (25) as command by a microprocessor (24) [

figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

Mendez does not specifically mention a term as registration of an identification code of the tire air pressure as claimed by the applicant.

However, Mendez does teach that every tire in the vehicle can be programmed their air pressure threshold value in the memory device in a form of EEPROM (25) from the processor (24) which for detecting the air pressure of the tire is below or higher than predetermined setting / threshold value in a memory device / EEPROM (25) as command by a microprocessor (24) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

Therefore, it would have been obvious to one having ordinary skill in the art to utilize the system of Mendez for storing / programming / registering the air pressure threshold value in the memory as a tire pressure monitoring system.

Regarding claim 30, Mendez discloses a tire air pressure monitoring system [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66] comprising:

- a plurality of tire pressure sensors (14) which may transmit (42) identification code signal [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66];

a memory device / EEPROM (25) for storing threshold value as identification code [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41];

- a reception step as a receiver to receive identification code signal from the transmitter (42) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66];

- a microprocessor (24) / controller for detecting an air pressure of the tire is below or higher than predetermined setting / threshold value in a memory device / EEPROM (25) includes warning message (64) [figs.1-3, 5, col.3, lines 27-54, col.4, lines 33-41 and col.5, lines 1-16];

- the plurality of tire pressure sensors (14) provided in the vehicle body which may transmit (42) identification code signal as command by a processor (24) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66];

- the plurality of tire pressure sensors (14) which may transmit (42) identification code signal to a receiver (22) when the air pressure of the tire is below or higher than predetermined setting / threshold value in a memory device / EEPROM (25) as command by a microprocessor (24) portable keyless entry remote control (16) for controlling doors & air pressures of vehicle [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

Mendez does not specifically mention a term as registration of an identification code of the tire air pressure as claimed by the applicant.

However, Mendez does teach that every tire in the vehicle can be programmed their air pressure threshold value in the memory device in a form of EEPROM (25) from the processor (24) which for detecting the air pressure of the tire is below or higher than predetermined setting / threshold value in a memory device / EEPROM (25) as command by a microprocessor (24) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the system of Mendez for storing / programming / registering the air pressure threshold value in the memory as a tire pressure monitoring system.

Regarding claims 31-37, Mendez discloses the plurality of tire pressure sensors (14) which may transmit (42) identification code signal as command by a processor (24) / portable keyless entry remote control (16) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66] and

Mendez teaches that every tire in the vehicle can be programmed their air pressure threshold value in the memory device in a form of EEPROM (25) from the processor (24) which for detecting the air pressure of the tire is below or higher than predetermined setting / threshold value in a memory device / EEPROM (25) as command by a microprocessor (24) includes warning message (64) [figs.1-3, 5, col.3, lines 27-54, col.4, lines 33-41 and col.5, lines 1-16].

Regarding claims 40-41, Mendez discloses the plurality of tire pressure sensors (14) which may transmit (42) identification code signal as command by a processor (24) / portable keyless entry remote control (16) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66].

Regarding claims 42-43, Mendez discloses the plurality of tire pressure sensors (14) which may transmit (42) identification code signal as command by a processor (24) as the ignition switch is turn on [figs.7-8, col.3, lines 27-66 and col.5, lines 32-56].

Regarding claim 45, Mendez discloses a smart control system in a form of portable keyless entry remote control (16) for controlling doors & air pressures of vehicle [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66] comprising:

- a plurality of tire pressure sensors (14) which may transmit (42) identification code signal [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66];

- a receiver (22) to receive identification code signal from the transmitter (42) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66];

- a microprocessor (24) / controller for detecting an air pressure of the tire is below or higher than predetermined setting / threshold value in a memory device / EEPROM (25) includes warning message (64) [figs.1-3, 5, col.3, lines 27-54, col.4, lines 33-41 and col.5, lines 1-16];

- the plurality of tire pressure sensors (14) provided in the vehicle body which may transmit (42) identification code signal as command by a processor (24) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-66];

- the plurality of tire pressure sensors (14) which may transmit (42) identification code signal to a receiver (22) when the air pressure of the tire is below or higher than predetermined setting / threshold value in a memory device / EEPROM (25) as command by a microprocessor (24) portable keyless entry remote control (16) for controlling doors & air pressures of vehicle [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

Mendez does not specifically mention a term as registration of an identification code of the tire air pressure as claimed by the applicant.

However, Mendez does teach that every tire in the vehicle can be programmed their air pressure threshold value in the memory device in a form of EEPROM (25) from the processor (24) which for detecting the air pressure of the tire is below or higher than predetermined setting / threshold value in a memory device / EEPROM (25) as command by a microprocessor (24) [figs.1-3, col.1, line 67 to col.2, line 45 and col.3, lines 27-54 and col.4, lines 33-41].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the system of Mendez for storing / programming / registering the air pressure threshold value in the memory as a tire pressure monitoring system.

7.   Claims 9-10, 23-24 & 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Mendez et al. (U.S. 5,463,374) in view of Joao (U.S. 6,542,077).

Regarding claims 9-10, 23-24 & 38-39, Mendez does not mention an overwriting object in the

method & system of the air pressure in the vehicle as claimed by the applicant.

Joao teaches a monitoring of air pressure in a vehicle having an overwriting function in

the memory as detecting an error is made by entering input data [col.28, lines 11-25 and col.61,

lines 22-36].

Therefore, it would have been obvious to one having ordinary skill in the art to employ

the teaching of Joao in the system of Mendez for preventing an indication from being made in

error in the tire pressure monitoring.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's
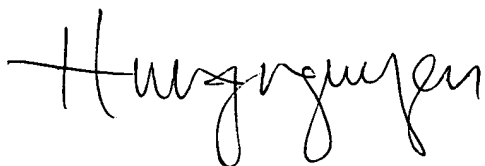
disclosure.

- Hattori (U.S. 5,924,055) Vehicle tire air pressure monitor.

- Juzswik (U.S. 6,597,284) Vehicle communication for tire sensor initiation and vehicle

  keyless entry via shared resource.

- Porter et al. (U.S. 6,745,624) Method and system for calibrating a tire pressure sensing

  system for an automotive vehicle.

7.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung T. Nguyen whose telephone number is (571) 272-2982. The examiner can normally be reached on Monday to Friday from 8:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass, Jeffery can be reached on (571) 272-2981. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Examiner: Hung T. Nguyen

Date: Oct.15, 2004